

DHRS6 (m): 293T Lysate: sc-119767

BACKGROUND

DHRS6 (dehydrogenase/reductase SDR family member 6), also known as EFA6R, SDR15C1, UCPA-OR, UNQ6308 or BDH2, is a 245 amino acid cytoplasmic protein belonging to the short-chain dehydrogenases/reductases (SDR) family, an evolutionarily conserved family of oxidoreductases found in all forms of life. DHRS6 is a novel, cytosolic type II R- β -hydroxybutyrate dehydrogenase that exists as two alternatively spliced isoforms and may have an essential role as a nutrient or building block in cellular survival. Human DHRS6 and its vertebrate orthologs show high levels of sequence identities to bacterial hydroxybutyrate dehydrogenases. DHRS6 may play an important role in the peripheral utilization of 3-hydroxybutyrate and its cytoplasmic localization with its high ratio of oxidized NAD⁺, the NAD⁺ dependence and the kinetic parameters of DHRS6 make it suitable to convert high levels of circulating 3-hydroxybutyrate into acetoacetate.

REFERENCES

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- Matsunaga, T., et al. 2008. Characterization of human DHRS4: an inducible short-chain dehydrogenase/reductase enzyme with 3 β -hydroxysteroid dehydrogenase activity. *Arch. Biochem. Biophys.* 477: 339-347.
- Parés, X., et al. 2008. Medium- and short-chain dehydrogenase/reductase gene and protein families: medium-chain and short-chain dehydrogenases/reductases in retinoid metabolism. *Cell. Mol. Life Sci.* 65: 3936-3949.
- Endo, S., et al. 2009. Molecular determinants for the stereospecific reduction of 3-ketosteroids and reactivity towards all-trans-retinal of a short-chain dehydrogenase/reductase (DHRS4). *Arch. Biochem. Biophys.* 481: 183-190.
- Zhang, Q., et al. 2009. Alternative transcription initiation and splicing variants of the DHRS4 gene cluster. *Biosci. Rep.* 29: 47-56.

CHROMOSOMAL LOCATION

Genetic locus: Bdh2 (mouse) mapping to 3 G3.

PRODUCT

DHRS6 (m): 293T Lysate represents a lysate of mouse DHRS6 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

DHRS6 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive DHRS6 antibodies. Recommended use: 10-20 μ l per lane.

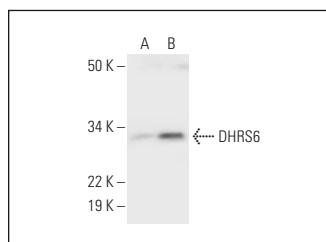
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

DHRS6 (H-5): sc-393008 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse DHRS6 expression in DHRS6 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



DHRS6 (H-5): sc-393008. Western blot analysis of DHRS6 expression in non-transfected: sc-117752 (A) and mouse DHRS6 transfected: sc-119767 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.